

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the present application. No amendments to the claims are made.

Listing of Claims:

1-7. (Canceled)

8. (Currently Amended) In a wireless communication system, a method comprising:
estimating a channel condition over a first time window;
comparing the estimated channel condition to a first threshold value;
determining a first transmission rate for transmission of quality messages and a second transmission rate for transmission of differential indicators based on the comparison;
transmitting quality messages at the first transmission rate; and
transmitting differential indicators independently of quality messages at the second transmission rate.

9. (Original) The method as in claim 8, wherein the first time window is dynamically adjusted based on operation of the system.

10. (Original) The method as in claim 8, further comprising:

calculating an average channel condition; and
calculating variance of the channel condition.

11. (Currently Amended) A wireless apparatus, comprising:

means for estimating a channel condition over a first time window;
means for comparing the estimated channel condition to a first threshold value;
means for determining a first transmission rate for transmission of quality messages and a second transmission rate for transmission of differential indicators based on the comparison;
means for transmitting quality messages at the first transmission rate; and
means for transmitting differential indicators independently of quality messages at the second transmission rate.

12. (Currently Amended) In a wireless communication system for processing voice communications and packet-switched communications, a base station comprising:

receive circuitry operative to receive signals on a reverse link, including a quality message with a parity check at a first rate, and differential indicators at a second rate, the quality message periodically providing a quality metric of a forward link, wherein the differential indicators track the quality metric between successive quality messages;

a memory storage unit operative to store a quality message received on the reverse link; and

a differential analyzer to update the quality message stored in the memory storage unit in response to the differential indicators and the parity check.

13. (Currently Amended) A wireless apparatus, comprising:

processing unit, operative for executing computer-readable instructions; and

a memory storage unit adapted to store a plurality of computer-readable instructions for:

generating quality messages and differential indicators at a first frequency and differential indicators at a second frequency, the quality messages providing information on the quality of a communication link, wherein the differential indicators track a quality metric between successive quality messages and wherein the second frequency is greater than the first frequency;

generating a parity check for each of the quality messages; and

transmitting the quality messages at the first frequency and differential indicators at the second frequency.

14. Cancelled.

15. (Currently Amended) A wireless apparatus, comprising:

processing unit, operative for executing computer-readable instructions; and

a memory storage unit adapted to store a plurality of computer-readable instructions for:

estimating a channel condition over a first time window;

comparing the estimated channel condition to a first threshold value;

determining a first transmission rate for transmission of quality messages and a second transmission rate for transmission of differential indicators based on the comparison;

transmitting quality messages at the first transmission rate; and

transmitting differential indicators at the second transmission rate independently of quality messages.

16. (Currently Amended) In a wireless communication system, the wireless communication system supporting a plurality of carriers, a method comprising:

determining an average channel condition among the plurality of carriers;

comparing the average channel condition to a first threshold value;

determining a first transmission rate for transmission of quality messages and a second transmission rate for the transmission of differential indicators based on the comparison;

transmitting quality messages at the first transmission rate; and

transmitting differential indicators at the second transmission rate independently of quality messages.

17. (Original) The method as in claim 16, further comprising:

assigning a weight to each of the plurality of carriers, wherein the average channel condition is a weighted average.

18. (Previously Presented) A wireless apparatus, comprising:

processing unit, operative for executing computer-readable instructions; and

a memory storage unit adapted to store a plurality of computer-readable instructions for:

determining a best channel condition associated with a first frequency; and

generating a quality message, the quality message including a quality indicator and a frequency indicator, the frequency indicator identifying the first frequency, wherein the frequency indicator is a pointer to select the first frequency from a plurality of predetermined frequencies; and

generating differential indicators separately from the quality message.

19. Cancelled.

20. (Currently Amended) A wireless apparatus, comprising:

a quality measurement unit configured to estimate a channel condition over a first time window;

a differential analyzer configured to compare the estimated channel condition to a first threshold value; and

a controller configured to determine a first transmission rate for transmission of quality messages and a second transmission rate for transmission of differential indicators based on the comparison, the differential analyzer further configured to generate quality messages at the first transmission rate, the differential analyzer further configured to transmit differential indicators at the second transmission rate independently of quality messages.

21. (Previously Presented) The wireless apparatus of claim 20, wherein the first time window is dynamically adjusted based on operation of the system.

22. (Previously Presented) The wireless apparatus of claim 20, wherein the controller is configured to:

calculate an average channel condition; and

calculate a variance of the channel condition.

23. (Previously Presented) The wireless apparatus of claim 11, further comprising:

means for dynamically adjusting the first window based on operation of the system.

24. (Previously Presented) The wireless apparatus of claim 11, further comprising:

means for calculating an average channel condition; and

means for calculating variance of the channel condition.

Claims 25-27 Cancelled.

28. (Currently Amended) A tangible storage medium having stored thereon processor-executable software instructions configured to cause a processor to perform steps comprising:

- estimating a channel condition over a first time window on a system;
- comparing the estimated channel condition to a first threshold value;
- determining a first transmission rate for transmission of quality messages and a second transmission rate for transmission of differential indicators based on the comparison;
- transmitting quality messages at the first transmission rate; and
- transmitting differential indicators at the second transmission rate independently of quality messages.

29 (Previously Presented) The tangible storage medium of claim 28, wherein the tangible storage medium has stored thereon processor-executable software instructions configured to cause a processor to perform further steps comprising dynamically adjusting the first time window based on operation of the system.

30. (Previously Presented) The tangible storage medium of claim 28, wherein the tangible storage medium has stored thereon processor-executable software instructions configured to cause a processor to perform further steps comprising:

- calculating an average channel condition; and
- calculating variance of the channel condition.